

DEPARTMENT OF THE ARMY SUPPLY BULLETIN

AMMUNITION SURVEILLANCE PROCEDURE FOR: GUIDED MISSILE INTERCEPT-AERIAL MIM-72A, MIM-72B, MIM-72C, MIM-72D, MIM-72E, AND MIM-72F, AND GUIDED MISSILE, INTERCEPT-AERIAL TRAINER, M30, AND M33 CHAPARRAL AIR DEFENSE GUIDED MISSILE SYSTEM

Headquarters, Department of the Army, Washington, D.C.

12 September 1984

REPORTING OF ERRORS

You can help improve this bulletin. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, U.S. Army Missile Command, ATTN: DRSMI-SNPM, Redstone Arsenal, AL 35898. A reply will be furnished to you.

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*This bulletin supersedes SB 742-1410-92-001, dated 2 August 1983.

Section I. INTRODUCTION

1. Purpose. This bulletin provides criteria required by AR 740-1, AR 702-6, SB 742-1, and SB 742-2 in determining the serviceability of the complete round MIM-72A, -72B, -72C, -72D, -72E, and -72F CHAPARRAL Air Defense Guided Missile, to include the M30 and M33 trainers, warheads MK48 and M250, safety and arming device M145 and MK13, rocket motors MK50 and M121, guidance sections MK28 and AN/DAW series and target detecting devices (TDD) MK15, MK24, and M817.

2. Scope. The information contained herein supplements information contained in (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 and (C) TM 9-1410-587-24(FMS) and applies to all Department of the Army activities within CONUS or OCONUS, with a receipt, storage and issue mission for the CHAPARRAL Weapon System.

3. Item Description.

a. Functional Description. The CHAPARRAL system is designed to provide low altitude air defense in the Division and Corps area. Protection is provided against rotary-winged and jet aircraft at low to medium altitudes. CHAPARRAL supplements the capability of all-weather radar-directed air defense systems.

b. Physical Description. The CHAPARRAL system comprises the following basic components.

(1) Missile MIM-72A, -72B, -72C, -72D, -72E, -72F and trainers M30 and M33.

(a) Intercept-aerial guided missiles MIM-72A and MIM-72B. The tactical MIM-72A and training tactical MIM-72B guided missiles are ground-launched, rocket-powered, supersonic surface-to-air missiles. They are guided to the target aircraft by a passive infrared radiation (IR) detection system. Each missile includes a MK28 guidance section with four fins, a TDD (MK15 utilized with the MIM-72A and the MK24 utilized with the MIM-72B), safety and arming (S-A) device MK13, a MK48 warhead, MK50 solid propellant rocket motor, two fixed MK4 wings with rollerons, and two fixed MK5 wings without rollerons.

(b) Intercept-aerial guided missile MIM-72C. The MIM-72C is a supersonic surface-to-air tactical missile that operates on the same fundamental premise as the MIM-72A tactical missile using the same components and accessories with

the following exceptions: In place of the MK28 guidance section used on the MIM-72A, the MIM-72C employs the AN/DAW 1B all aspect IR guidance section. In place of the MK15 TDD, the M817 directional doppler (DIDO) TDD is utilized and the M250 blast/frag warhead has been integrated into the system in place of the MK48 continuous rod warhead. The M145 S-A device is utilized in place of MK13 S-A device. The fins are slightly different. They are not interchangeable with fins of MIM-72A, -72B, or -72D missiles.

(c) Intercept-aerial guided missile MIM-72D. The MIM-72D missile is assembled for Foreign Military Sales, and should not be found in the US inventory. The differences between this and other CHAPARRAL models can be found in table 1.

(d) Intercept-aerial guided missile MIM-72E. The MIM-72E is identical to the MIM-72C with the exception of the rocket motor. In place of the MK50 solid propellant rocket motor, the M121 solid propellant rocket motor is utilized to provide a reduced signature trail.

(e) Intercept-aerial guided missile MIM-72F. The MIM-72F missile is assembled for Foreign Military Sales, and should not be found in the US inventory. The differences between this and other CHAPARRAL models can be found in table 1.

(f) Trainer M30 and M33. The training missile has a dome protector, a guidance section, fins, TDD, S-A device, warhead, motor and wings which have the size, weight, appearance, and many functions of the MIM-72 components. The M30 trainer is similar in appearance to MIM-72A, -72B and -72D missiles and the M33 trainer is similar in appearance to MIM-72C, -72E and -72F missiles. When the M30 is equipped with a tactical MK28 guidance section or the M33 is equipped with a tactical AN/DAW series guidance section, the trainer can be mounted on a launcher rail and used to track aircraft like the tactical rounds, although it cannot be launched. An umbilical adapter is used in the tracking configuration to prevent the actuation of certain elements in the guidance section when the gunner's fire button is pressed. Wings and fins of the trainers are the same as those on tactical rounds. Other components have inert markings to distinguish them from tactical components. Some trainers contain reworked fins and wings that are not suitable for tactical missiles. These wings are

Table 1. Difference Among Models

Missile Subsystem	MK/MOD	72A	72B	72C	72D	72E	72F
<i>a. Guidance section</i>							
1569570	MK28, MOD 0	X	X		X		
2604720	MK28, MOD 1	X	X		X		
2605665	MK28, MOD 2	X	X		X		
<i>b. Guidance section</i>							
13059201	AN/DAW-1						X
13006300	AN/DAW-1B			X		X	
<i>c. Fin assembly</i>							
2603669	MK28	X	X		X		
<i>d. Fin assembly</i>							
10234011	AN/DAW Series			X		X	X
<i>e. Target detecting device</i>							
2238269	MK15, MOD 3	X					
2203339	MK24, MOD 1		X				
<i>f. Target detecting device</i>							
11716476	M817	X		X	X	X	X
<i>g. Safety & arming device</i>							
1584366	MK13, MOD 0	X	X		X		
10234569	M145, MOD 0	X	X	X	X	X	X
<i>h. Warhead section</i>							
1569753	MK48, MOD 1	X	X				
2603815	MK48, MOD 3	X	X				
2605141	MK48, MOD 5	X	X				
<i>i. Warhead section</i>							
9256709	M250			X	X	X	X
<i>j. Rocket motor</i>							
1569700	MK50, MOD 0	X	X	X	X		X
13007205	M121, MOD 0					X	
<i>k. Rolleron wing</i>							
1569701	MK4, MOD 0	X	X	X	X	X	X
<i>l. Flat plate wing</i>							
1569711	MK5, MOD 0	X	X	X	X	X	X

painted bronze. The M30 and M33 trainer are packaged, shipped and stored in the M570 container. However, since its purpose is to permit the safe training of personnel who will operate and maintain the MIM-72 missiles, the M30 and M33 contain no explosives.

(2) Warheads MK48 and M250.

(a) Warhead MK48 for guided missile intercept-aerial MIM-72A and MIM-72B. Warhead MK48 Mods 1, 3 and 5 are specified for Army application, however, only the Mod 5 version should be found in the stockpile. The MK48 warhead incloses a continuous-rod destructive device, with the Army versions containing approximately 6.1 pounds of PBXN-3 explosive material shaped in a bow tie configuration. The exterior of the warhead is cylindrical in shape, 12.16 inches long, 5 inches in diameter and has a total weight of approximately 25.25 pounds. The MK48 is packaged for storage and shipment in an M587 metal drum.

(b) Warhead M250 for guided missile intercept-aerial MIM-72C, -72D, -72E, and -72F. The M250 is a blast/frag warhead, constructed of aluminum (with exception of the fragments) and is cylindrical in shape. It is 12.16 inches long, 5 inches in diameter and contains approximately 6.6 pounds of 75/25 OCTOL/TNT. Total weight of the warhead approximates 25 pounds. This warhead is packaged for shipment and storage in the M587 container.

(3) Safety and arming device MK13 and M145. The MK13 device is used in the MIM-72A, -72B, and -72D missiles. This device prevents detonation of the missile warhead during assembly, handling, and during the first portion of missile flight. The MK13 S-A device is packed one per M589 metal drum. A window at the aft end of the S-A device displays either "S" (safe) or "A" (armed). The M145 device is essentially the same as the MK13 device, and is used in the MIM-72C, -72E and -72F missiles.

(4) Rocket motor MK50. The rocket motor MK50 is used in the MIM-72A, -72B, -72C, -72D and -72F missiles. The motor consists of a steel case, an igniter at the forward end, a hollow star-shaped cylindrical solid propellant grain, a nozzle and weather seal. It weighs 97 pounds of which 60.3 pounds is propellant; it is 72.4 inches long and 5 inches in diameter. A pin at the forward end of the

motor mates with a slot in the warhead, insuring alinement of components. Four sets of brackets (ribs) at the aft end secure the wings to the rocket motor. The igniter circuit is shielded from stray electromagnetic radiation. The MK50 rocket motor is packed, shipped, and stored in the MK37 container.

(5) Rocket motor 121. The rocket motor M121 is used in the MIM-72E missile. The M121 rocket motor (smokeless) is essentially the same as the MK50 in size, propellant weight, and total weight. The difference is the smaller launch signature generated by the different propellant used in the M121.

(6) Guidance sections.

(a) Guidance section MK28, Mod 0, Mod 1, and Mod 2. The MK28 series guidance section is used in conjunction with the MIM-72A, -72B, and -72D missiles. The MK28 major components of the guidance section include gyro telescope, a head coil assembly, a refrigerated detector unit (RDU), a compressed air circuit, a carrier amplifier, a magnetic amplifier and a guidance servo mechanism. The servo subsystem has a gas grain generator, a turbogenerator, a fin positioning mechanism, a contact fuze and self-destruct module, and contact fuze piezoelectric crystals. The MK28 guidance section contains 1.25 pounds of pyrotechnical material, weighs 31 pounds and is 24.3 inches long by 5 inches in diameter. The guidance section is packaged for shipment and storage in the M586 container.

(b) Guidance section AN/DAW series. The AN/DAW 1B guidance section is utilized with the MIM-72C and MIM-72E missiles. The AN/DAW 1 guidance section is utilized with MIM-72F missiles. In order to maximize use of existing assets, the design of the AN/DAW series is predicated on zero changes to the launcher and retention of a maximum number of the proven components of the MK28 basic guidance section. Thus, a large portion of the seeker and most of the servo are identical. The electronics section incorporates the latest hybrid circuit technology for increased sophistication and reliability. The printed circuit board construction provides for greater ease of testing during manufacturing and eliminates the weight of the potting compound used in the basic MK28 guidance section. AN/DAW series guidance section is packaged one per container with a total weight of approximately 100 pounds.

(7) *Target detecting devices.*

(a) *General.* TDDs utilized in the CHAPARRAL missiles are a cylindrical assembly with forward and aft coupling rings, electrical connectors at the forward end, and a threaded flange at the aft end. The forward end is electrically connected to the guidance section and is physically secured with the forward coupling ring. The S-A device is installed on the aft end of the TDD. The aft coupling ring secures the warhead to the TDD. The TDDs are packaged for storage and shipment in the M588 container.

(b) *MK15.* The MK15 TDD is used in conjunction with the MIM-72A missile. The MK70 thermal battery, which provides an independent power supply, is sealed within the TDD. The battery is activated by a electrical signal when the missile is launched.

(c) *MK24.* The MK24 is used in conjunction with the MIM-72B missile. Some MK24 TDDs have been modified by removal of a pin. The MK24 TDD is for training use. The MK70 thermal battery sealed inside the TDD supplies voltage for the TDD circuits. The battery is activated by electrical signal when the missile is launched.

(d) *M817 DIDO TDD.* The M817 is used in conjunction with the MIM-72C, -72D, -72E and 72-F missiles. The term DIDO used as part of the nomenclature is the acronym for directional doppler. The M817 TDD may be used in place of the MK15 TDD.

(8) *Fin assembly.* Four fin assemblies are secured to moveable fin brackets on the guidance section. A variation in mounting of the fin assemblies occurs between those fins mounted to the MK28 guidance section, and those mounted to the AN/DAW series guidance section. The triangular fin assembly includes a latching mechanism, a fin attachment screw, a fin release screw, and a pin. Screws are located near the base of the fin.

(9) *Wing assembly MK4 and MK5.* Four wing assemblies are secured to the aft end of the rocket motor. Each of the two MK4 wings is equipped with a cager assembly and a roller-on-damper assembly. The two solid cast MK5 wings are simple air-foils. The MK4 wing is a metal covered honeycomb structure bonded to ribbed aluminum frames.

c. *Data.* The physical data for the CHAPARRAL missile system is as follows:

- (1) Missiles MIM-72A and MIM-72B
 - Dimensions
 - Packaged 125 in. x 17.5 in. x 19 in.
 - Unpackaged 114.5 in. x 5 in.
 - Weight
 - Packaged 305 lbs.
 - Unpackaged 190 lbs.
 - Explosive weight
 - (for Q-D calculations) 6.1 lbs.
- (2) Missiles MIM-72C, MIM-72D and MIM-72F.
 - Dimensions
 - Packaged 125 in. x 17.5 in. x 19 in.
 - Unpackaged 114.5 in. x 5 in.
 - Weight
 - Packaged 305 lbs.
 - Unpackaged 190 lbs.
 - Explosive weight
 - (for Q-D calculations) 6.6 lbs.
- (3) Missile MIM-72E.
 - Dimensions
 - Packaged 125 in. x 17.5 in. x 19 in.
 - Unpackaged 114.5 in. x 5 in.
 - Weight
 - Packaged 305 lbs.
 - Unpackaged 190 lbs.
 - Explosive weight
 - (for Q-D calculations) 69 lbs.
- (4) Warheads.
 - (a) MK48 Mods 1, 3, and 5.
 - Dimensions
 - Packaged 28.5 x 19.4 in. (dia).
 - Unpackaged .. 12.16 in. x 5 in. (dia).
 - Weight
 - Packaged 60 lbs.
 - Unpackaged 25 lbs.
 - Explosive weight 6.1 lbs.
 - (b) M250.
 - Dimensions
 - Packaged 28.5 in. x 19.4 in. (dia) (approx).
 - Unpackaged ... 12.16 in. x 5 in. (dia).
 - Weight
 - Packaged 63 lbs (approx).
 - Unpackaged 28 lbs (approx).
 - Explosive weight 6.6 lbs.

- (5) Safety and arming devices MK13 and M145.
 Dimensions
 Packed21.25 in.
 x 14.68 in.
 Unpacked7.1 in.
 x 2.2 in. (dia).
 Weight
 Packed22.75.
 Unpacked2 lbs.
 Explosive weight1.7 grams.
- (6) Rocket motor MK50 and M121.
 Weight
 Packed138 lbs.
 Unpacked97 lbs.
 Explosive weight60 lbs (approx).
- (7) Guidance section.
 (a) MK28.
 Dimension
 Packed35.06
 in. x 23.60 in.
 Unpacked24.3 in.
 x 5 in. (dia).
 Weight
 Packed100 lbs.
 Unpacked31 lbs.
 Explosive weight1.25 lbs.
- (b) AN/DAW series.
 Dimension
 Packed35.06

in. x 23.60 in.
 Unpacked24.3 in.
 x 5 in. (dia).
 Weight
 Packed95 lbs (approx).
 Unpacked26 lbs (approx).
 Explosive weight1.25 lbs (approx).

- (8) Target detecting device.
 (a) MK15 and MK24.
 Dimensions
 Packed21.88 in.
 x 16.5 in. (dia).
 Unpacked6.5 in.
 x 5.0 in. (dia).
 Weight
 Packed50 lbs.
 Unpacked10 lbs.
- (b) M817.
 Dimensions
 Packed21.88 in.
 x 16.5 in. (dia).
 Unpacked6.5
 in. x 5 in. (dia.)
 Weight
 Packed50 lbs.
 Unpacked9.5 lbs.

d. *Identification.* For nomenclature, National Stock Number and item part number for items covered in this bulletin, refer to appendix B.

Section II. SURVEILLANCE

4. **Storage.** The following information is applicable to the storage of the CHAPARRAL missile:

a. *Inspection.* In compliance with appropriate provisions outlined in SB 742-1, (C) TM 9-1410-585-24, (C) TM 9-1410-586-24, (C) TM 9-1410-587-24 (FMS), and TM 9-1300-206 or DARCOM R 385-100, field service and industrial stocks of CHAPARRAL missiles must be inspected to insure that they are adequately identified, preserved/packaged, and otherwise suitable for safe handling and storage.

b. *Types of Storage.* The recommended types of storage for the CHAPARRAL missile system stored in the M570 container in their order of preference are as follows:

- (1) Stradley or igloo magazines.
- (2) Above ground magazines, when they can be secured in accordance with AR 190-11.

(3) Outdoor storage sites may be used when adequate buildings are not available. Missiles stored outside must be in the M570 container and stacked at least six inches above the ground on packing material and be covered with weatherproof coverings. Each covering must allow free circulation of air among the containers. Trenches should be dug to prevent water from flowing under the stacks.

c. *Hazard Classification.*

(1) Guided missile intercept-aerial MIM-72A, -72B, -72C, -72D, -72E and MIM-72F.

(a) Quantity Distance Class (12) 1.2 (1.1 for MIM-72E).

(b) Storage Compatibility Group E.

(c) DOT marking "ROCKET AMMUNITION WITH EXPLOSIVE PROJECTILE."

- (d) Transportation (DOT) Hazard Class A.
- (e) Coast Guard Class X-C.
- (2) *Warhead MK48 Mods 1, 3, and 5.*
 - (a) Quantity Distance Class 1.1.
 - (b) Storage Compatibility Group D.
 - (c) DOT marking "EXPLOSIVE PROJECTILE."
- (d) Transportation (DOT) Hazard Class A.
- (3) *Warhead M250.*
 - (a) Quantity Distance Class 1.1.
 - (b) Storage Compatibility Group D.
 - (c) DOT marking "EXPLOSIVE PROJECTILE."
- (d) Transportation (DOT) Hazard Class A.
- (4) *Safety and arming device MK13 and M145.*
 - (a) Quantity Distance Class (04) 1.2.
 - (b) Storage Compatibility Group B.
 - (c) DOT marking "DETONATING FUZE CLASS C EXPLOSIVES HANDLE CAREFULLY."
- (d) Transportation (DOT) Hazard Class C.
- (5) *Rocket motor MK50.*
 - (a) Quantity Distance Class 1.3.
 - (b) Storage Compatibility Group C.
 - (c) DOT marking "ROCKET MOTOR CLASS B EXPLOSIVE."
- (d) Transportation (DOT) Hazard Class B.
- (6) *Rocket motor M121.*
 - (a) Quantity Distance Class 1.1.
 - (b) Storage Compatibility Group C.
 - (c) DOT marking "ROCKET MOTOR CLASS A EXPLOSIVE."
- (d) Transportation (DOT) Hazard Class A.
- (7) *Guidance section MK28 series.*
 - (a) Quantity Distance Class 1.4.
 - (b) Storage Compatibility Group S.
 - (c) DOT marking "EXPLOSIVE POWER DEVICE, HANDLE CAREFULLY, KEEP FIRE AWAY."
- (d) Transportation (DOT) Hazard Class C EXPLOSIVE.
- (8) *Guidance section AN/DAW series.*
 - (a) Quantity Distance Class 1.4.
 - (b) Storage Compatibility Group S.
 - (c) DOT marking "EXPLOSIVES POWER DEVICE, HANDLE CAREFULLY, KEEP FIRE AWAY."
- (d) Transportation (DOT) Hazard Class C.
- (9) *Target detecting device, MK15, MK24, and M817.*
 - (a) Quantity Distance Class. None.
 - (b) Storage Compatibility Group. None.
 - (c) DOT marking. None.

d. *Storage Temperature Limits.* Storage temperature limits for the CHAPARRAL missile and associated Class V components are contained in table 2.

Table 2. *Storage Temperature Limits*

Missile/Class V Components	°F	°C
MIM-72 A	-65 to 165	-54 to 74
MIM-72 B	-40 to 165	-40 to 74
MIM-72 C	-65 to 160	-54 to 71
MIM-72 D	-65 to 165	-54 to 74
MIM-72 E	-50 to 160	-45 to 71
MIM-72 F	-65 to 160	-54 to 71

e. *Age Issue Control.* CHAPARRAL missiles will be issued from storage in compliance with SB 9-219, i.e., on a "first-in first-out" basis or oldest stock first.

f. *Shelf Life.*

(1) The tentative shelf life for missile components is in table 3. Shelf life determination for the assembled missile round is made by reviewing individual component information and applying the most restrictive interval e.g. the MIM-72E uses the M121 rocket motor which has a shelf life of 10 years, therefore the MIM-72E shelf life is 10 years.

5. Surveillance.

a. *General.* Prior to storage, periodically while in storage, and prior to issue, field service and industrial stocks of CHAPARRAL missiles will be inspected using the appropriate provisions outlined in SB 742-1, SB 742-2, TM 9-1300-206 and the specific instructions contained in (C) TM 9-1410-585-24, (C) TM 9-1410-586-24, (C) TM 9-1410-587-24 (FMS) and this bulletin. Inspection requirements listed in Depot Maintenance Work Requirements (DMWR's) will not be used in lieu of the requirements listed herein and (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS).

b. *Types of Inspection.* The following inspections "as appropriate" are conducted in determining the serviceability of the CHAPARRAL missile components, stored individually and in their containers.

(1) *Initial receipt inspection (IRI).* This inspection is performed on weapons or component parts received directly from the manufacturer/vendor. Upon receipt at the depot, verify that

Table 3. CHAPARRAL Missiles Component Shelf Life

Model	Nomenclature	Shelf Life Months
MK 51-2	Generator, Gas (10234679)	120
AN/DAW series	Generator, Gas (2605997)	204
MK 50	Guidance Section	120
M121	Rocket, Motor	144
MK-13	Rocket Motor, Smokeless	120
M145	Safe-Arm Device	INDF
M817	Safe-Arm Device	144
MK 24	Target Detection Device	120
MK 15	Target Detection Device	INDF
MK 48-1, -3, -5	Target Detection Device	INDF
M250	Warhead	INDF
	Warhead	120

rounds/components received agree with shipping documents. Inspection must comply with the appropriate provisions outlined in chapter 3 and other related sections of (C) TM 9-1410-585-24, (C) TM 9-1410-586-24, and (C) TM 9-1410-586-24 (FMS). A sample of all materiel received will be selected in compliance with table 4 of this bulletin.

(2) *Receipt inspection (RI).*

(a) Materiel received from depots, both CONUS and OCONUS. Providing rounds/components have had a periodic inspection or test performed within the previous 4 months or a pre-issue inspection or test performed within the previous 4 months or a pre-issue inspection prior to shipment and item(s) were issued in a serviceable condition, the receipt inspection will consist of a 100% visual inspection of containers for damage in transit only. If shipment does not meet this criteria, or if in the opinion of the Chief Quality Assurance

Specialist (Ammunition Surveillance), an additional inspection is required, the materiel may be 100% inspected or sample inspected for those defects noted in chapter 3 and other related sections of (C) TM 9-1410-585-24 and (C) TM 9-1410-586-24. Sample selection must comply with table 4 of this bulletin.

(b) Materiel received from posts, camps, stations and using units both CONUS and OCONUS. Missiles and/or components in this category will be 100% inspected as outlined in chapter 3 and other related sections of (C) TM 9-1410-585-34 and (C) TM 9-1410-586-24, and (C) TM 9-1410-587-24 (FMS).

(3) *Periodic inspection (P).*

(a) Complete round CHAPARRAL missiles in storage in a serviceable condition will be inspected and tested annually. Sample selection will comply with table 4 of this bulletin.

Table 4. Sampling and Acceptance Criteria

Lot or group number	Sample size Critical/Major	Acceptance quality level						
		Critical		Major		Sample size	Minor	
		Ac	Re	Ac	Re	Minor	Ac	Re
0-25	20/5	0	1	0	1	5	1	2
26-50	20/5	0	1	0	1	8	2	3
51-90	20/20	0	1	1	2	13	3	4
91-150	20/20	0	1	1	2	20	5	6
151-280	20/32	0	1	2	3	32	7	8
281-500	20/50	0	1	3	4	50	10	11

(b) Missile components in storage in a serviceable conditions will be inspected annually. Sample selection will comply with table 4 in this bulletin.

NOTE

All containers which have been, or are suspected of having been opened, tampered with, or damaged will be carefully checked for the presence of critical defects and other damages to the component or round.

(c) All MK28 guidance sections (unassembled) will be checked (tested) annually. Mated target detecting devices and guidance sections must be tested in accordance with (C) TM 9-1410-585-24 and TM 9-4935-587-12 or TM 9-49351587-14 for MK28 guidance sections.

(d) When an annual inspection is required on CHAPARRAL basic load stocks (assembled missiles), supporting ordnance organization will be notified to arrange for inspection, or schedules determined for direct exchange with known serviceable round. An inspection of less than 12 months will be the prerogative of the local commander in conjunction with the Chief, QA Specialist (Ammunition Surveillance) providing there is sufficient justification to warrant a decrease in interval.

(e) Inspection interval for repairable un-serviceable missiles or components is extended to, but is not to exceed 3 years.

(f) Inspection of packing material will be conducted as outlined in SB 742-1.

(4) *Pre-issue inspection (PI)*. Inspect using appropriate procedures outlined in chapters 3 and 6 of (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 and (C) TM 9-1410-587-24 (FMS) unless the items to be issued have been inspected within the preceding 4 months and found serviceable. Items requiring inspection will have samples selected as outlined in table 4.

(5) *Special inspection*. These inspections are conducted at the direction of higher headquarters or to satisfy local requirements. Inspection criteria to include sample size will be determined by the requirement to inspect.

c. *Defect Classification*. Defect classification appropriate to the CHAPARRAL weapon system, used in table 5, are defined as follows:

(1) *Critical*. A critical defect is one that judgment and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the item.

(2) *Critical defective*. A critical defective is a unit or product containing one or more critical defects.

(3) *Major*. A major defect is one other than critical that may result in failure, or reduce materially the useability of the weapon.

(4) *Major defective*. A major defective is a unit of product containing one or more major defects.

(5) *Minor*. A minor defect is one that is not likely to reduce materially the useability of the weapon for its intended purpose or is a departure from established standards having little bearing on the effective use or operation of the item in question. Minor defects in many instances may well indicate poor workmanship during manufacture or maintenance.

(6) *Minor defective*. A unit of product having one or more minor defects.

(7) *Mixed defective*. A mixed defective is a unit of product containing one or more defects of each of two or more defect classes.

(8) *Incidental*. Damage defects not of critical, major, or minor types. These defects will be corrected if and when maintenance is performed on the item.

6. Disposition of Inspection Samples.

a. CHAPARRAL rounds removed from containers for inspection will be replaced in serviceable containers free of defects prior to issue.

b. Samples containing minor defects that are insufficient in quantity to reject the lot should be corrected locally whenever possible and returned to parent lot.

c. If the number of defects found during the inspection is sufficient to reject the lot, a 100% inspection of the lot will be performed and the results reported as outlined in DA PAM 738-750.

d. Critical defects normally represent hazardous and/or unsafe condition and as such will be reported immediately to EOD for disposition. Final disposition will be accomplished as required by DA PAM 738-750.

7. *Evaluation of Inspection Results*. Results of local inspections conducted in accordance with this publication will be locally evaluated by a qualified Quality Assurance Specialist (Ammu-

Table 5. Missile and Missile Component Defect Classification

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool
1	All	Initiate Local Inspection Form.		
2	All	Determine Shelf Life Status.		
3	All	Determine Suspense or Restriction Status.		
4	All	Insure all inspection personnel have read and are familiar with all pertinent inspection and safety requirements.		
5	All	Inspection of Shipping Containers.		
		a. Inspect for proper identification markings and color coding for correctness and completeness. Misidentification that would indicate tactical rounds as inert rounds is considered critical.	Minor/ Critical	Visual
		b. Insure proper painting and presence of security seal.	Minor	Visual
		NOTE: A missing security seal being considered a minor defect is not meant to circumvent security requirements for the item under consideration.		
		c. Mating and securing of cover, handles for operation and security.	Minor	Visual
		d. Holes or open seams in metal containers.	Major	Visual
		e. Humidity indicator colored not blue (when appropriate).	Major	Visual
		f. Dents and/or distortions. When not affecting the contents, either of these defects are considered minor. If container is dented or distorted to the point of affecting the contents, they are considered major	Minor/ Major	Visual
		g. Improper type or amount of internal packing material.	Minor/ Major	Visual/ Drawing
		h. Presence of dirt or other debris inside.	Minor/ Major	Visual
		i. Presence of moisture.	Minor/ Major	Visual
		j. Missing or improper quantity of desiccant.	Minor/ Major	Visual
		k. Missing hardware.	Minor/ Major	Visual
		l. Missing or deteriorated gaskets.	Minor/ Major	Visual
		m. Presence of loose explosive material (as appropriate).	Major/ Critical	Visual/ Chemical Test
		n. Improper, missing, or illegible marking. To be determined as critical, major or minor in accordance with defect classification of paragraph 5.c.	Minor/ Major/ Critical	Visual

Table 5. Missile and Missile Component Defect Classification (Continued)

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool
5	(Cont'd)	NOTE: In addition to the above, particular attention must be paid to the damage criteria and circumstances as listed in (C) TM 9-1410-585-24, (C) TM 9-1410-586-24, and (C) TM 9-1410-587-24 (FMS).		
6	All	<p>Inspection of Guidance Section MK28 and/or AN/DAW Series. See (C) TM 9-1410-585-24 for MK28 Guidance Section or (C) TM 9-1410-586-24 for AN/DAW-1A and 1B Guidance Sections or (C) TM 9-1410-587-24 (FMS) for AN/DAW-1 Guidance Section.</p> <p>NOTE: This step applies to inspection of the Guidance Section as a component of a complete round or as a separate entity.</p> <p>a. Dirt, dust, or other foreign matter.</p> <p>b. Dome protector missing or contaminated by foreign matter.</p> <p>c. Seeker dome: (1) Scratch (2) Loose (3) Rupture</p> <p>d. Guidance section skin: (1) Cracks, holes, or punctures. (2) Scratches exceeding 0.015 inch deep (minor scratches that do not penetrate external finish are permitted). (3) Dents exceeding 0.015 inch deep and 0.375 inch in diameter. (4) Gouges exceeding 0.025 inch deep and 0.500 inch in diameter total. (5) Nicks exceeding 0.015 inch deep.</p> <p>e. Smokey discoloration around portholes (indicates gas grain generator has been fired).</p> <p>f. Torn or punctured weather seal around fin brackets.</p> <p>g. Damaged interconnecting cables and/or plugs.</p> <p>h. Broken or cracked umbilical insulation; damaged pins; or fouled inlet. Any of the above discrepancies are major and will require replacement of the umbilical cable.</p> <p>i. Missing, broken, or bent umbilical cable mounting hardware.</p> <p>j. Dirt, dust, paint, or similar foreign matter on guidance section. These are minor defects, however, they do require cleaning before issue.</p>	<p>Minor</p> <p>Major</p> <p>Major Major Critical</p> <p>Major Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Minor</p>	<p>Visual</p> <p>Visual</p> <p>Visual Visual Visual</p> <p>Visual Depth Gage</p> <p>Depth Gage</p> <p>Depth Gage</p> <p>Depth Gage</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p>

Table 5. Missile and Missile Component Defect Classification (Continued)

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool
6	(Cont'd)	<p><i>k.</i> Improper, missing, or illegible marking. To be determined as critical, major, or minor in accordance with defect classification of paragraph 5.c.</p> <p><i>l.</i> Broken, bent, missing fin restraint device or mounting hardware (MK28 only).</p> <p><i>m.</i> Fin restraint device broken or missing (MK28 only).</p> <p><i>n.</i> Torque paint on guidance section missing or cracked (AN/DAW series only).</p>	<p>Minor/ Major/ Critical</p> <p>Major</p> <p>Major</p> <p>Minor</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p>
7	All	<p>Inspection of Target Detecting Devices.</p> <p>NOTE: This step applies to inspection of a complete round, as a separate entity or in conjunction with another component.</p> <p><i>a.</i> MK15 and M817 (See (C) TM 9-1410-585-24 for MK15 or MK24. See (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS) for M817).</p> <p>(1) Improper, missing, or illegible marking. Defect class to be determined as major or minor in accordance with the defect classification in paragraph 5.c. of this bulletin.</p> <p>(2) Scratches, holes, or pits on radome (scratches that do not penetrate into the fiberglass are permitted). Scratches exceeding 0.006 inches deep on the skin will be classified a major defect.</p> <p>(3) Paint, dirt, dust, rust, corrosion and other foreign matter. This defect can range from incidental dirt and/or dust to minor or major rust and corrosion depending on degree. Stage I rust or corrosion is considered incidental, while stages II and III are minor if they can be effectively cleaned. Stage IV is a major defect.</p> <p>(4) Physical damage to edges(s) of TDD, connector or pins.</p> <p>(5) Damaged coupling rings, O-Ring seals and/or mounting hardware. Damage in this instance should be construed to mean not effectively useable.</p> <p>(6) Damaged threads for securing S-A Devices on aft end of TDD.</p> <p>(7) (MK15 only) Any electrical test failure is considered to be a major defect.</p> <p><i>b.</i> MK24 (See (C) TM 9-1410-585-24).</p> <p>(1) Dirt, dust, rust, corrosion, and other foreign matter. This defect can range from incidental dirt and/or dust to minor or major rust and corrosion depending on degree. Stage I rust or corrosion is considered incidental, while Stages II and III are minor if they can be effectively cleaned. Stage IV is a major defect.</p>	<p>Minor/ Major</p> <p>Major</p> <p>Incidental/ Minor/ Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Incidental/ Minor/ Major</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Test Equipment</p> <p>Visual</p>

Table 5. Missile and Missile Component Defect Classification (Continued)

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool	
7	(Cont'd)	(2) Physical damage to edge(s) of TDD, connector, or pins.	Major	Visual	
		(3) Damaged coupling rings, O-ring seal and/or mounting hardware. Damage in this instance should be construed to mean not effectively useable.	Major	Visual	
		(4) Damaged threads for securing S-A device on aft end of TDD.	Major	Visual	
		(5) Cracked or broken sensor windows.	Major	Visual	
WARNING					
S-A devices that have been dropped or are suspected of having been dropped will be placed in condition code H for destruction.					
8	All	Safety and Arming Devices MK13 and M145. (See (C) TM 9-1410-585-24 for MK13). See (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS) for M145).			
		WARNING			
		If the Safety and Arming device is found to be armed (all or part of the letter "A" is visible in rear window or the latch is not visible or the red mark is visible in the forward window) the device is considered hazardous, should not be handled and should be reported immediately to EOD for disposal.			
		a. Inspect the Safety and Arming Device for Armed Condition.	Critical	Visual	
		b. Missing or improperly installed cushion.	Critical	Visual	
		c. Damaged, worn, torn, or aged rubber cushion. These defects may be considered minor or major depending on the degree and will be left up to the judgement of the inspector to classify. Regardless of degree of deterioration, cushion should be replaced.	Minor/ Major	Visual	
		d. Connector wet, dirty or damaged.	Major	Visual	
		e. Missing or damaged externally threaded ring. Ring must be replaced prior to S-A device being returned to a serviceable condition.	Major	Visual	
		f. Improper, missing or illegible markings. To be determined as critical, major, or minor in accordance with paragraph 5.c.	Minor/ Major/ Critical	Visual	
		g. Blemishes and discoloration of aluminum casing.	Incidental	Visual	
		h. Scratches, dents, gouges, nicks or scrapes exceeding 0.003 in.	Major	Depth Gage	
i. Forward window broken.	Major	Visual			

Table 5. Missile and Missile Component Defect Classification (Continued)

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool
9	All	<p>Warheads MK48 and M250. (See (C) TM 9-1410-585-24 for MK48 (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS) for the M250).</p> <p>a. Dents, pits, holes, and similar defects in the skin.</p> <p>b. Scratches in excess of 0.006 inch deep.</p> <p>c. Dirt, dust and other similar foreign matter. These defects can be considered incidental to minor depending on degree and judgement of the inspectors.</p> <p>NOTE: Improper, missing, or illegible marking. To be determined as critical major or minor in accordance with defect classification of paragraph 5.c.</p> <p>d. Correct marking and serviceable exterior paint.</p> <p>e. Exudation or evidence of explosive spillage during pouring/loading.</p> <p>f. Presence of sounds, indicating loose internal components.</p> <p>g. Verify that S-A cavity is free of distortions, rust, damage or contamination. Using fixture 2117316 and thickness gage, verify 0.0015 to 0.002 inch clearance between fixture and MK48 warhead. To gage M250 warhead, use fixture 24ADN 43032 or P155961.</p>	<p>Major</p> <p>Major</p> <p>Incidental/Minor</p> <p>Minor/Major/Critical</p> <p>Major</p> <p>Major</p> <p>Major</p>	<p>Visual</p> <p>Depth Gage</p> <p>Visual</p> <p>Visual</p> <p>Chemical Test/Visual</p> <p>Manual</p> <p>Gage</p>
10	All	<p>Rocket Motors MK50 and M121</p> <p>a. Dents, pits, holes, and similar damage to the skin.</p> <p>b. Scratches in excess of 0.006 inch deep.</p> <p>c. Missing, broken, or damaged hangers.</p> <p>d. Missing, damaged, or cracked weather seal at aft end.</p> <p>e. Defective or bent wing ribs.</p> <p>f. Dirt, dust, rust, corrosion, and other similar foreign matter. These defects can be considered incidental, minor or major depending on the defect and the degree with final determination being left to the inspector's discretion.</p> <p>g. Serviceable exterior paint.</p> <p>NOTE: Improper, missing, or illegible marking. To be determined as critical major or minor in accordance with defect classification of paragraph 5.c.</p>	<p>Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Major</p> <p>Minor/Major</p> <p>Minor</p>	<p>Visual</p> <p>Depth Gage</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual/Mkg Dwg</p>

Table 5. Missile and Missile Component Defect Classification (Continued)

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool
10	(Cont'd)	<p><i>h.</i> Damaged or improperly installed forward head closure assembly.</p> <p><i>i.</i> Damaged coupling ring and/or mounting hardware.</p> <p><i>j.</i> Damaged warhead mating pin at forward end of rocket motor.</p> <p><i>k.</i> Missing identification plate at forward end.</p>	Major Major Major Major	Visual Visual Visual Visual
11	All	<p>Wing MK4. (See (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS)).</p> <p><i>a.</i> Dents exceeding 0.5 inch in diameter or 0.06 inch in depth.</p> <p><i>b.</i> Holes, gouges, or punctures in skin or leading edge.</p> <p>(1) 0.006 inch.</p> <p>(2) Exceeding 0.006 inch.</p> <p>(3) Scratches not penetrating surface finish are incidental.</p> <p><i>c.</i> Missing paint 0.25 to 0.50 inches in diameter is considered minor. Missing paint exceeding 0.50 is major.</p> <p><i>d.</i> Base screws missing, bent, or broken.</p> <p><i>e.</i> Alinement screw (at aft end or wing) missing, bent or broken, or stripped threads.</p> <p><i>f.</i> Dirt, dust, rust, corrosion and other foreign matter. These defects can be considered incidental, minor or major depending on the particular defect and the degree. Final determination is left to the inspector's discretion.</p> <p><i>g.</i> Warped or misaligned wing.</p>	Major Major Minor Major Incidental Minor/ Major Major Major Major/ Minor/ Incidental Major	Ruler Depth Gage Visual Depth Gage Depth Gage Visual Ruler Visual Visual Visual Straight Edge
12	All	<p>Rolleron-Damper Assembly (MK4 Wing) (See (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS)).</p> <p><i>a.</i> Inspect Rolleron cover for damage and secure fit.</p> <p><i>b.</i> Oil leakage.</p> <p><i>c.</i> Rolleron noisy, sluggish, or wobbles when rotated by hand.</p> <p><i>d.</i> Fails rolleron-damper test.</p> <p><i>e.</i> Missing or damaged epoxy seal.</p> <p><i>f.</i> Dirt, dust, paint and other similar foreign matter. These defects can be considered incidental or minor depending on degree. Final determination is left to the inspector's discretion.</p>	Major Major Major Major Minor Incidental/ Minor	Visual Visual Visual Test Visual Visual

Table 5. Missile and Missile Component Defect Classification (Continued)

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool
13	All	Cager Assembly (MK4 Wing) (See (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS)). a. Detent bent, missing or broken. b. Fails cager test.	Major Major	Visual Manual/ Scale
14	All	Wing MK5 (See (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS)). a. IRI and RI only, after the wing screw has been torqued to the required limit, the wing must have no loose motion. b. Dents exceeding 0.5 inch in diameter or 0.06 in depth. c. Holes, gouges, or punctures in skin or leading edge. d. Scratches exceeding 0.10 inches in depth. e. Missing paint. f. Base screws missing, bent, or broken. g. Alinement screw (at aft end of wing) missing, bent or broken, or stripped of threads. h. Dirt, dust, rust, corrosion or other similar foreign matter. These defects can be considered incidental, minor or major depending on the particular defect and the degree. Final determination is left to the inspector's discretion. i. Warped or misaligned wing.	Major Major Major Major Minor Major Major Incidental/ Minor Major Major	Visual Ruler/ Depth Gage Visual Visual Visual Visual Visual Straight Edge
15	All	Fin (See (C) TM 9-1410-585-24 for MK28 Fin, (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS) for AN/DAW Fin). a. Gouges, holes or pits in skin or leading edge. b. Missing anodized finish in excess of 0.25 inch in diameter. c. Warped or misaligned fin. d. When assembled fin contacts the guidance section skin at any operating position. NOTE: If a replacement fin does not correct the deficiency, the guidance section will require replacement which also constitutes a major defect.	Major Major Major Major	Visual Ruler Visual Visual

Table 5. Missile and Missile Component Defect Classification (Continued)

Seq No.	Type inspection	Inspection characteristics	Defect class	Tool
16	All	<p>Umbilical Cable (C) TM 9-1410-585-24, (C) TM 9-1410-586-24 or (C) TM 9-1410-587-24 (FMS).</p> <p><i>a.</i> One or more tabs separated from plug. Metal exposed exceeds 0.2 inches.</p> <p><i>b.</i> Sleeve loose or separated from plug. Metal exposed exceeds 0.2 inches.</p> <p><i>c.</i> Loose or missing screws. Metal exposed exceeds 0.2 inches. A loose screw will be considered a minor defect. Missing screw(s) and exposed metal exceeding established criteria are major defects.</p> <p><i>d.</i> Sleeve separated from plug. Metal exposed exceeds 0.2 inches.</p>	<p>Major</p> <p>Major</p> <p>Minor/ Major</p> <p>Major</p>	<p>Visual Ruler</p> <p>Visual Ruler</p> <p>Visual</p> <p>Visual Ruler</p>

dition Surveillance) and appropriate condition codes(s) assigned to comply with AR 725-50.

8. Records and Reports.

a. Local surveillance, storage and stock control records should be maintained to reflect current condition (serviceability) and location of each CHAPARRAL missile and individually packaged components.

b. Reports as required by appendix C of this bulletin will be submitted as stipulated.

c. In addition, a complete report of all inspections conducted in accordance with this bulletin will indicate the total number (by lot and serial number) of CHAPARRAL missiles and individually packaged components inspected, and must include a detailed description of conditions found and any pertinent recommendations. This report will be forwarded to Commander, U.S. Army Missile Command, ATTN: DRSMI-QS Redstone Arsenal, AL 35898, during July and January of each year.

APPENDIX A
REFERENCES

(C) TM 9-1410-585-24	Intercept-Aerial Guided Missile MIM-72A, MIM-72B, MIM-72D, and Training Missile M30
(C) TM 9-1410-586-24	Intercept-Aerial Guided Missile MIM-72C and MIM-72E
(C) TM 9-1410-587-24(FMS)	Intercept-Aerial Guided Missile MIM-72F
TM 9-1300-206 or DARCOMR 385-100	Ammunition and Explosives Standards Safety Manual
TM 9-4935-587-12	Shop Equipment AN/TSM-95
TM 9-4935-1587-14	Shop Equipment AN/TSM-95A
DA PAM 738-750	The Army Maintenance Management System
SB 742-1	Ammunition Surveillance Procedures
SB 742-2	Grant Aid, Civilian Aid and Foreign Military Sales Program Standards for Class V Materiel Ammunition Surveillance Procedures
SB 9-219	Priority of Issue and Use of Guided Missile and Large Rocket Ammunition in Training
AR 190-11	Physical Security of Weapons, Ammunition, and Explosives
AR 702-6	Ammunition Stockpile Reliability Program (ASRP)
AR 725-50	Requisitioning, Receipt and Issue System
AR 740-1	Storage and Supply Activity Operations

APPENDIX B

IDENTIFICATION

<i>Nomenclature</i>	<i>NSN</i>	<i>Part Number</i>
GM Intercept-Aerial MIM-72A w/cntr	1410-00-930-8358	11508877-1
GM Intercept-Aerial MIM-72B w/cntr	1410-00-421-1632	11508877-2
GM Intercept-Aerial MIM-72C w/cntr	1410-00-555-6185	11508877-3
GM Intercept-Aerial MIM-72D w/cntr	1410-00-028-8603	11508877-4
GM Intercept-Aerial MIM-72E w/cntr	1410-01-095-3248	11508877-6
GM Intercept-Aerial MIM-72F w/cntr	1410-01-150-2863	11508877-7
GM Trainer M30 w/cntr	6920-00-880-2466	11508877-5
GM Trainer M33 w/cntr	6920-01-116-5362	11508877-8
Container, Shipping & Storage M570 MIM-72A, -72B, -72C, -72D, -72E, 72F and Trainers M30 and M33	8140-00-018-9516	11074804
Warhead, MK48 Mod 1 w/cntr	1336-00-916-9474	11508880-1
Warhead, MK48 Mod 3 w/cntr	1336-00-176-1222	11508880-2
Warhead, MK48 Mod 5 w/cntr	1336-00-350-9419	11508880-3
Warhead M250 w/cntr	1336-00-555-6181	11508880-4
Container, Shipping & Storage M587 for Whd MK48 and M250	8140-00-034-1449	10240553
Safety & Arming Device MK13 w/cntr	1336-00-801-7550	11508879-1
Safety & Arming Device M145 w/cntr	1336-01-037-7348	11508879-2
Container, Shipping & Storage M589 for S&A Device	8140-00-798-2304	10678905
Rocket Motor M121 w/cntr	1337-01-092-6246	11508881-2
Rocket Motor MK50 w/cntr	1337-01-112-5753	11508881-3
Container, Shipping & Storage for Rocket Motor M121 and MK50		13142938
Guidance Section MK28 Mod 0 w/cntr	1420-00-916-6777	11508876-1

**APPENDIX B
IDENTIFICATION**

<i>Nomenclature</i>	<i>NSN</i>	<i>Part Number</i>
Guidance Section MK28 Mod 1 w/cntr	1420-00-176-1221	11509976-2
Guidance Section MK28 Mod 2 w/cntr	1420-00-478-5879	11509976-3
Gudiance Section AN/DAW-1 w/cntr	Not assigned	11508876-6
Guidance Section AN/DAW-1A w/cntr	1420-00-555-6186	11508876-4
Guidance Section AN/DAW-1B w/cntr	1420-00-051-9449	11508876-5
Container, Shipping & Storage M586 for Guidance Section	8140-00-034-1437	10240516
Target Detecting Device MK15 w/cntr	1420-00-938-6435	11508878-1
Target Detecting Device MK24 or AIT w/cntr	1420-00-179-5265	11508878-2
Target Detecting Device M817, DIDO w/cntr	1390-00-556-5163	11508878-3
Container, Shipping & Storage M588 for TDD	8140-00-798-2315	10226939
Wing Rolleron MK4 Mod 0	1420-00-915-5120	1569701
Wing Flat Plate MK5 Mod 0	1420-00-916-5121	1569711
Fin Assembly MK28	1420-00-915-3708	2603669
Fin Assembly AN/DAW	1420-00-619-2396	10234011

APPENDIX C
REPORT FORMS AND REFERENCES

<i>Form Number</i>	<i>Nomenclature</i>	<i>Reference</i>
DA Form 2415	Ammunition Condition Report	DA PAM 738-750
DA Form 3244R	Ammunition Issues, Receipts, and Expenditure Report	AR 710-9
SF 364	Report of Discrepancy	AR 735-11-2
SF 368	Quality Deficiency Report	AR 702-7
SF 368	Quality Deficiency Report (used as an EIR)	DA PAM 738-750

By Order of the Secretary of the Army:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

Distribution:

To be distributed in accordance with DA Form 12-32, Section II, Organizational Maintenance requirements for CHAPARRAL Missile System.

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